

**Health Science L.D.C.
Garrett College**
**[https://mhec.maryland.gov/institutions_training/Pages/acadaff/AcadProgInstitApprovals/
NewAcademicProgramProposals.aspx](https://mhec.maryland.gov/institutions_training/Pages/acadaff/AcadProgInstitApprovals/NewAcademicProgramProposals.aspx)**

A. Centrality to institutional mission statement and planning priorities:

1. Provide a description of the program, including the certificate to be awarded, each area of specialization/concentration (if applicable), purpose or objective, and how it relates to the institution's approved mission.

Garrett College (GC) is proposing a new Lower Division Certificate (L.D.C.) in Health Science.

This program is intended to provide the basis for further study in the health sciences field. It provides a course of study designed to meet the needs of students who plan to study and transfer to a college or university that grants an associate or baccalaureate degree in various areas of Health Sciences. The certificate would expose students to general knowledge coursework allowing them to specialize when they transfer. This program also aligns with the College's strategic objective to "Provide Garrett College students, credit and noncredit, with innovative, relevant curriculum delivered by dedicated faculty/instructors who remain current in their field of study." (Garrett College FY2021-FY2025 Strategic Plan).

2. Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

The availability of this program will offer advantages for students including: a career-ladder opportunity for students who begin their coursework in Continuing Education and Workforce Development and decide to continue their studies and a reduction of tuition costs for Garrett County high school graduates who take advantage of the Garrett County Scholarship Program. This directly aligns with a and b of Garrett's Mission and Statement.

The mission statement of Garrett College includes the following commitments:

- a. To offer associate degrees and certificate programs as well as continuing education to meet the transfer, career, workforce development, and lifelong learning needs of our students and the community
- b. To be committed to the ongoing development of engaging, innovative and sustainable curricula, programs, and initiatives that are responsive to a changing world.

The main underlying mission of community colleges is to serve their communities. The College makes it a priority to meet local workforce needs by developing long-term

relationships with industry partners. Success comes from taking great care to listen to the needs of industry partners on multiple levels—individual students, businesses, the economy—locally, regionally, and nationally. It is through these connections that it was determined that the College needed to develop an L.D.C. certificate program in Health Science to prepare students for further study and supply the area workforce.

3. Provide a brief narrative of how the proposed program will be funded for at least the first five years of program implementation. (Additional related information is required in section L.)

The addition of the Health Science Certificate will not require additional funding or personnel, and it is expected that tuition revenues will be sufficient to fund the program. The Certificate will rely on courses already taught at this institution.

4. Provide a description of the institution's commitment to:
 - a) ongoing administrative, financial, and technical support of the proposed program
 - b) continuation of the program for a period sufficient to allow enrolled students to complete the program.

Our current allied health prep-for-transfer pathways sit in the STEM division while the college is looking to expand its offerings. This lower division certificate program will be handled in the Academic Affairs office with Christa Bowser, the Interim Associate Dean of Academic Affairs. Through coordination with the STEM department, administrative and financial support for the program will be provided. Technical support will be provided by the College's IT Department and student assistance will be provided by the Learning Commons. If in the future a decision is made to discontinue the L.D.C. in Health Science program, a teach-out plan will be developed and put in place to ensure that all students in the program will have the opportunity to obtain all courses required to complete the program.

B. Critical and compelling regional or statewide needs as identified in the State Plan:

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:
 - a. the need for the advancement and evolution of knowledge
 - b. societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education
 - c. the need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs

Ongoing staff shortages in healthcare are a real problem that makes providing patient-centered care a daunting task. As per a recent report by CNN, the United States will need to hire 2.3 million new healthcare workers by 2025 to be able to take care of the aging population qualitatively. Maryland is predicted to be one of four states that will have a

critical healthcare worker shortage. There are many reasons for this shortage, but the one of most concern to the Garrett County community is that there are limited new graduates to fill open positions. Simply put, there are not enough programs that graduate skilled workers to meet the current patient demands. This includes not only physicians and registered nurses, but also allied health professionals, imaging technologists, respiratory therapists, lab technicians, etc. Each profession suffers from a lack of labor issue.

2. Provide evidence that the perceived need is consistent with the 2022 Maryland State Plan for Postsecondary Education.
 - a. Statewide Plan Goal #1: Student Access
 - b. Statewide Plan Goal #2: Student Success
 - c. Statewide Plan Goal #3: Innovation

The proposed program is well aligned with the 2022 Maryland State Plan for Postsecondary Education. The Lower Division Certificate in Health Science is intended to prepare students for further education so they can contribute to the needs of society. The long-term success of the College's academic programs attests to their quality and effectiveness.

Through multiple modality course offerings, students can undertake course-related activities when it is convenient for them, allowing them to participate in and to complete their program of study even if their responsibilities/work schedules do not permit regular class attendance. This supports Goal 1, "Access: Ensure equitable access to affordable and quality postsecondary education for all Maryland residents."

The proposed program is also consistent with Goal 2, "Success: Promote and implement practices and policies that will ensure student success." Completion of a credential such as a licensure or certification, will allow students to progress in their chosen field with proven achievement. This certificate can be completed in one-year time frame. Garrett College works diligently to ensure student success with key attributes such as: dedicated advisors, retention alert software and the collaboration between faculty and the student services staff.

Similarly, the proposed program is consistent with Goal 3, "Innovation: Foster innovation in all aspects of Maryland higher education to improve access and student success," which articulates Maryland's aspiration to be "a national leader in the exploration, development, and implementation of creative and diverse education and training opportunities that will align with state goals, increase student engagement, and improve learning outcomes..." By leveraging technology in innovative ways to make the College's offerings more accessible and interactive, we have removed the "time and place" barrier to education for many students and non-traditional students.

3. Identify how the program will match priorities identified in the 2022 Maryland State Plan for Postsecondary Education.

- a. Statewide Priority #6: Improve systems that prevent timely completion of an academic program.

The L.D.C. will help us provide a certificate to students who traditionally do not gain a degree from the college before they transfer into other disciplines like nursing, dental hygienics, health informatics, etc. This aligns with the action items: “Consider alternatives to the traditional academic credentials, such as stackable credentials” and “Identify and support “Near Completer” students” under Priority 6.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. Describe potential industry or industries, employment opportunities, and expected level of entry (*ex: mid-level management*) for graduates of the proposed program.
2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.

According to the Maryland Department of Labor, 19,405 additional individuals trained in the health care professions listed in the chart below will be needed in Maryland by 2030. That represents an increase of 16% over the numbers that were needed in 2020. Assisting individuals in Garrett County interested in these fields by enabling them to take their health care prerequisites at Garrett College, then transfer to another Maryland Community or 4-year college to complete the program, will save them time and money by getting students into clinical programs faster.

Maryland Occupational Projections 2020 - 2030
Associate Degree Level Health Care Programs

	2020	2030	Increase	Pct Change
Cardiovascular Technologists and Technicians	1,576	1,837	261	16.56%
Dental Hygienists	4,702	4,716	14	0.30%
Diagnostic Medical Sonographers	2,181	2,530	349	16.00%
Emergency Medical Technicians and Paramedics	6,147	7,019	872	14.19%
Health Information Technologists, Medical Registrars, Surgical Assistants, & Healthcare Practitioners	3,332	3,650	318	9.54%
Medical Assistants	16,479	18,457	1,978	12.00%
Occupational Therapy Assistants	1,025	1,371	346	33.76%
Physical Therapist Assistants	2,559	3,368	809	31.61%

Radiologic Technologists	5,255	5,956	701	13.34%
Registered Nurses	71,386	83,711	12,325	17.27%
Respiratory Therapists	3,203	3,868	665	20.76%
Surgical Technologists	2,664	3,093	429	16.10%
Veterinary Technologists and Technicians	3,516	3,854	338	9.61%
TOTAL	124,025	143,430	19,405	

Source: Maryland Occupational Projections - 2020-2030 - Workforce Information and Performance <http://dllr.maryland.gov/lmi/iandoproj/maryland.shtml>

- Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.

According to the U.S. Department of Labor, employment in healthcare occupations is projected to grow much faster than the average for all occupations over the next eight years. Healthcare occupations are projected to add more jobs than any of the other occupational groups. In Maryland alone, as represented in the chart above, an additional 19,405 healthcare workers will be needed by 2030. This projected growth is due to an aging population, leading to greater demand for healthcare services. To meet this demand, colleges must graduate more individuals with the credentials to be employed in these professions. Garrett College's ability to provide the general courses all healthcare workers need, through the Health Science certificate, will assist with preparing more individuals to meet this need.

Source:
Occupational Outlook Handbook. U.S. Bureau of Labor Statistics.
<https://www.bls.gov/ooh/healthcare/home.htm>

- Provide data showing the current and projected supply of prospective graduates.

As mentioned above, healthcare jobs will be among the fastest growing in the United States over the next few years, accounting for about 2.3 million new jobs, according to recent projections released by the Bureau of Labor Statistics (BLS). In many states, including Maryland, the projected supply of healthcare workers will be unable to fill demand, according to Mercer's recent U.S. healthcare labor market analysis, which compares future supply and demand of workers to project workforce availability across 50 healthcare occupations through 2026. In 2019-2020, 2,462 associate degrees in healthcare technician programs were awarded by Maryland Community Colleges. That number will have to increase significantly to keep up with Maryland occupational projections for trained individuals in these fields.

Sources:

High Job Growth Expected for US Healthcare – But Where Will the Workers Be? Mercer, LLC.: <https://mercer.us/our-thinking/career/healthcare-workforce.html>

2021 Data Book. Maryland Higher Education Commission.

<https://mhec.maryland.gov/publications/Documents/Research/AnnualPublications/2021DataBook.pdf>

D. Reasonableness of Program Duplication:

1. Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.

A search of the Maryland Higher Education Commission program inventory database for Health Sciences indicates that there are only three programs at the community college level in the State. Cecil College, Carroll Community College, and Prince George's Community College have a Lower Division Certificate (L.D.C.) in Health Sciences. The closest of the three colleges to Garrett is Cecil Community College and it is 163 miles from Garrett so it is highly unlikely that the programs will be competing for the same students. The Garrett program will allow local students an accessible and affordable program near their residence.

Source: Academic Program Inventory. Maryland Higher Education Commission.
https://mhec.maryland.gov/institutions_training/pages/HEPrograms.aspx

2. Provide justification for the proposed program.

The data provided above demonstrates that there is a shortage of healthcare technicians to fulfill the rising demand in Maryland and the United States. The approval of this program for Garrett College will help close the gap between the number of positions available and qualified individuals available for hire. More students completing the general education requirements allow more students to enter critical clinical programs in the Allied Health field.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.

No impact on HBIs is anticipated from this new program.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.

No impact on HBIs is anticipated from this new program.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10):

1. Describe how the proposed program was established and describe the faculty who will oversee the program.

This program is designed to assist in the need for healthcare workers in Garrett County and the State of Maryland. In addition, the College desires to break down barriers for students desiring careers in healthcare by developing programs that are local and financially reasonable.

Recently retired biology professor Carolyn Deniker developed this program, with the assistance of biology professor Christa Bowser (now the Interim Associate Dean of Academic Affairs). These two full professors were the academic advisors of the college's Allied Health prep-for-transfer pathways. Christa Bowser will oversee the program moving forward.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

Upon completion of the Lower Division Certificate in Health Science, students will be able to:

1. Demonstrate the entry level knowledge and written and verbal communication skills and abilities associated with many disciplines within the field of health care.
2. Identify structures of human anatomy, beginning at the basic cellular level and concluding with body systems, and relate each system of the body to its functions.
3. Demonstrate understanding of physical, cognitive, linguistic, and psychological development of human beings.
4. Be prepared to transfer to a health care discipline associate or baccalaureate degree program.

3. Explain how the institution will:
 - a) provide for assessment of student achievement of learning outcomes in the program
 - b) document student achievement of learning outcomes in the program

Student Learning Outcomes Assessment is a deliberate, systematic, and collaborative process driven by the College's commitment to improving student learning. It is a purposeful course of action that defines student accomplishments in terms of expected learning outcomes and core competencies. Actual student achievement is measured using established standards. The assessment process is learning-centered and accumulates data from numerous sources to determine what students know, what skills they possess, how they conceptualize, and how they will continue to learn. The overall goal of assessment is to create a quality learning environment using best practices that inspire creativity, innovation, and critical thinking.

The L.D.C. Health Science program will be evaluated at the course and program level on an annual basis for its first three years. Upon successful progress it will then enter the College's formal and comprehensive program review cycle of every 8 years. Data from these processes are used for program improvement. Resource allocation is driven by the needs addressed in the assessment process.

4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.

Health Sciences Lower Division Certificate Program Course and Credit Requirements

Certificate Requirements/Recommended course sequence:

Course Prefix and Number	Course Title	Credits
	Fall	
FYE101	First Year Experience	1
BIO200	Human Anatomy and Physiology I	4
ENG101	Comp I- Expository Writing	3
GER Math	College Algebra or Introductory Statistics (Check with the receiving institution's catalog to select the correct math class)	3
GER Soc/Beh Sci	Ex. General Psychology or Principles of Sociology	3
Elective *		3
	Semester Total	17
	Spring	
GER Arts and Hum	Ex. Intro to Communication	3
Electives *		12-14

	Semester Total	15/17
	<i>Total Credits</i>	<i>32-34</i>

*** Students should choose electives that most closely align with the program/institution they plan to transfer to. Commonly selected electives are: GER Soc/Beh Science, BIO 201, BIO 241, BIO 103, and CHE 100.**

Course Descriptions

ATH230 Cultural Anthropology (3 credits)

Introduces students to the discipline of anthropology, the concept of culture, and the value of cross-cultural perspectives. Topics covered include language, subsistence, economics, politics, family and marriage, “race” and ethnicity, gender and sexuality, religion, globalization, health and medicine, and public engagement. (Social and Behavioral Sciences GER)

BIO103 Medical Terminology (3 credits)

This is an introductory course in medical terminology. The course focuses on accurate spelling and pronunciation of terms and building knowledge of basic medical vocabulary with an emphasis on prefixes, suffixes, roots, and combining vowels. Anatomical, physiological, and pathological terminology are covered. Terminology related to the body systems is discussed.

BIO130 Principles of Nutrition (3 credits)

This course is designed to develop an understanding of the essentials of nutrition regarding general health, prevention of disease, and the functions of nutrients in body building. Emphasis will be placed on nutritional requirements for individuals in various stages of development, proper food selection, preparation, and specific nutritional problems of our times. (Science non-lab GER)

BIO200 Human Anatomy and Physiology I (4 credits)

A study of human structure and function with major emphasis based on structure and function, body organization, tissues, body fluids and their regulation, and selected systems, including the integumentary, articular, skeletal, muscular, and nervous. (Science GER)

BIO201 Human Anatomy and Physiology II (4 credits)

Second course in a sequence examining the structure and function of the circulatory, respiratory, reproductive, urinary, digestive endocrine systems, nervous systems, and the special senses. This course will emphasize normal human anatomy and physiology and common pathologic conditions. (Science GER)

BIO241 General Microbiology (4 credits)

An introductory course in basic microbiology with selected applied techniques in the areas of culture, identification, limited physiology of normal flora and well-known pathogens. Host responses to disease, organism transmission, and the relationship of organisms to man, animals, and environment will be examined. (Science GER)

CHE100 Introduction to College Chemistry (4 credits)

An introductory course in the fundamentals of chemistry. Some topics to be included are atomic theory, bonding, periodicity, stoichiometry, solutions, ionizations, acids-bases, and equilibrium. Also, selected topics will be chosen from organic and biochemistry. (Science GER)

COM101 Introduction to Communication (3 credits)

This course is designed to introduce the student to the fundamentals of human communication and public address. Students will study the basic elements of the communication process; basic techniques of interpersonal communication; elements of speech composition and speech presentation skills applied to informative and persuasive speaking. (Arts and Humanities GER)

ENG101 Composition I-Expository Writing (3 credits)

A course in writing expository and research-based essays that emphasize the development of clear theses through various rhetorical modes including description, narration, comparison-contrast, analogy, definition, analysis, classification, argumentation, and persuasion. Students will write and extensively revise before submitting for a grade a minimum of five expository papers, four-to-six typed, double-spaced pages. Additionally, students are strongly encouraged to visit the Writing Center for help with papers prior to turning in work to be graded. As writer voices develop, students use print and nonprint sources to help support theses, leading to writing adhering to MLA guidelines

FYE101 First Year Experience (1 credit)

This course facilitates a successful transition for students entering higher education. It connects first-year students to the college environment and academic resources and emphasizes the value of learning and student responsibilities. Designed to equip students with the skills and strategies necessary to take control of their academic lives, to help students develop a better understanding of themselves, and to guide them through the academic and career development process. Emphasis will be placed on academic success, personal growth and self-management, campus/community resources and involvement, effective use of technology, and ethical citizenship through interaction between faculty, staff, students, and the community.

MAT105 College Algebra (3 credits)

An introduction to functions from multiple points of view – verbal, graphical, numerical, and symbolic – with an emphasis on using functions to model real-world phenomena. The linear, quadratic, exponential, and logarithmic families of functions are explored in depth. (Mathematics GER)

MAT210 Introductory Statistics (3 credits)

An introduction to the practice of statistics. Topics include sampling bias and how to avoid it, the concern with confounding variables, the purpose of randomized experiments, the use of placebos and blinding, visual and numerical summaries of data, the interpretation of graphs and statistics, concerns regarding linear regression, patterns of sampling variability, estimating with confidence in the face of uncertainty, the scientific method, weighing the evidence provided by data, and statistical fallibility. (Mathematics GER)

PSY101 General Psychology (3 credits)

Deals with the psychologist's attempt to understand humanity. Topics include psychological and physiological processes; biological foundations of behavior; biological base for integrated behavior; methods of psychology, tests and measurements, experimental design; intelligence; segments of the psychological process including motives, emotions, sensation and perception, processes of learning; personality and adjustment; and neurosis, psychosis, and psychotherapy. (Social and Behavioral Sciences GER)

PSY102 Human Growth and Development (3 credits)

This course emphasizes principles underlying human behavior and development. Primary attention is given to understanding school-age children, but overall human development from conception to death is explored. (Social and Behavioral Sciences GER)

SOC101 Principles of Sociology (3 credits)

An introduction to the primary concepts, terminology, and methods of investigation employed in the analysis of social institutions. Topics include processes leading to social stratification, analysis of several types of groups and their interrelationships, social class and social change, ethnic groups, problems of population growth and the development of human resources. (Social and Behavioral Sciences GER)

5. Discuss how general education requirements will be met, if applicable

As a Lower Division Certificate, general education requirements are not mandated, however general education courses have been included in Arts and Humanities, Biological and Physical Sciences, English Composition, Mathematics, and Social and Behavioral Science.

6. Identify any specialized accreditation or graduate certification requirements for this program and its students.

There are no specialized accreditation or graduate certification requirements for this program.

7. If contracting with another institution or non-collegiate organization, provide a copy of the written contract.

There are no contracting agreements with other educational institutions or non-collegiate organizations.

8. Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.

The College will provide similar resources to students in the L.D.C Health Science program as are provided for other programs. Information regarding curriculum, course, and certificate requirements, including a suggested course sequence that demonstrates how the program can be completed in a year, is provided via the College website and the Garrett College Catalog. Information about the current learning management system (Blackboard), the availability of academic support services and financial aid resources, and costs and payment policies are found on various pages within the Garrett website and conveyed to students by the program advisors.

9. Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.

The College's Office of Marketing & Creative Services is responsible for the production of all public relations and promotional market materials. This office works collaboratively with College departments to ensure that all public relation announcements, advertisements, recruiting and admissions materials, and other communications contain information that is truthful, accurate, and compliant with College policies. Prior to publication, the appropriate office or department conducts a final review of all information checking for accuracy and truthfulness. The Office of Analytics, Institutional Research and Assessment verifies all data.

The Office of Marketing and Creative Services publishes a Brand Management guide further ensuring consistency among College communications. This guide addresses print and electronic communication including the College's social media policies.

H. Adequacy of Articulation

1. If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements.

No specific articulation agreements have been developed for this program. However, health science programs in the State of Maryland require similar prerequisites and general education courses. This knowledge was used in developing this program and to increase ease of student transfer to associate and baccalaureate programs.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

- 1. Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faculty member will teach in the proposed program.**

No additional faculty are needed for the L.D.C. in Health Science program at this time. There are several qualified full-time faculty currently employed by the college in STEM who will teach the courses in this program. Alyssa Tchinell assistant professor of Biology, Fred Stemple associate professor of Biology, Jeff Reitz professor of Mathematics, and Tim Foster professor of Mathematics. These four faculty hold their terminal degree, and two have earned Full Professor rank at the college. These faculty along with other faculty members who commonly teach the courses in the program, and their credentials, are listed below.

Faculty Member	Degree	Discipline	Academic Title/Rank	Courses Taught
Christa Bowser	BS, MS	Biology	Professor	BIO130
Timothy Foster	BS, MAT	Mathematics	Professor	MAT105
Dr. Ryan Harrod	BS, MS, PhD	Anthropology	Chief Academic Officer	ATH230
Anna James	BA, MFA	English	Associate Professor	ENG101
Dr. Terry Kasecamp	BS, MS, PhD	Psychology	Professor	PSY101, 102
Dr. Michelle Murray	BS, MEd, PhD	Sociology Criminology	Assistant Professor	SOC101
Dr. Jeff Reitz	BS, MS, PhD	Mathematics	Professor	MAT210
Alyssa Tichinel	BS, MS	Biology	Assistant Professor	BIO200, 201, 241

- 2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:**
 - a) Pedagogy that meets the needs of the students
 - b) The learning management system
 - c) Evidenced-based best practices for distance education if distance education is offered.

- a. Training in pedagogy that meets the needs of students is provided in faculty workshops, curriculum mapping activities within and between programs and general education requirements, annual implementation of assessment results at the course and program level.
- b. Trainings for the LMS Blackboard are offered on an open/drop-in schedule for faculty. Many user videos are posted internally. New features, requirements and frequent topics of difficulty are addressed and demonstrated in monthly faculty meetings.
- c. The College supports faculty participation in regional and national distance education conferences. The coordinator of distance learning presents topics at each monthly faculty meeting and has instituted required checklists and evaluation of online courses. Results from these are verified real-time each semester and are incorporated in annual faculty evaluation.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12).

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

The Library at Garrett College offers extensive resources for academic research with a large collection that includes books, periodicals, electronic journals, newspapers, audiobooks, CDs, videos, and DVDs. In addition to student computer workstations with Microsoft Office products and internet access for academic projects, the GC library offers extensive services to students including, but not limited to, the following: multiple electronic databases including, ProQuest, Science Resource Center, and Access Science; interlibrary loan services; and on-campus access and 24-hour remote access. These resources are assessed annually to determine what additional reference or library resources may be required.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

1. Provide an assurance that physical facilities, infrastructure, and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.

Current physical facilities and infrastructure at Garrett College are adequate to offer the new certificate program without the need for additional resources. Classrooms are equipped with the latest and updated instructional equipment which includes computers and audio/visual devices including projectors. Many spaces have the capacity for synchronous and in-person instruction to occur at the same time. Garrett's Information Technology department supports this equipment with software updates and any maintenance or repairs necessary to maintain quality instruction.

Science labs are well equipped in the new Offutt STEM Center on campus. This center opened in 2018.

Computers are available for students, faculty and staff use in classrooms, computer labs, and the library. Free printing and wireless internet access can be found in all those locations. Wireless internet access is also available in the dormitories.

The Testing Center can be used by instructors for students with disability accommodation needs.

The advising staff provides course information that will assist students interested in pursuing the study of Health Sciences.

The College complies with the American with Disabilities Act and has the necessary infrastructure and instructional equipment for ADA accommodations. The Office of Student Support Services provides the evaluations for ADA accommodations.

2. Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:
 - a) An institutional electronic mailing system, and
 - b) A learning management system that provides the necessary technological support for distance education

a. Garrett College faculty receive an employee e-mail address and access to the College email system on their first day of employment. Students receive a student e-mail address upon enrollment. Students are requested to activate their college e-mail account immediately and must use that e-mail address for all College correspondence. Once activated, this is also the only e-mail address that the College will use to contact students. Students are asked to check their college e-mail, even when classes are not in session.

b. To facilitate learning, all credit courses use Blackboard, Garrett College's learning management system. Blackboard sites support easy access to course materials, interactions with the instructor and other students, course grades, and much more. Students are automatically enrolled into Blackboard course sites. Faculty members are given Blackboard access and training within their first week of employment. At a minimum, faculty members are required to use Blackboard to post their syllabus, faculty contact information, announcements, and course communications. In addition, the grade book within Blackboard must be used to provide students with a reasonable understanding of the status of their grades throughout the duration of the course.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

1. Complete **Table 1: Resources and Narrative Rationale**. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If

resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.

Table 1. Program Resources

Resource Categories*	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	0	0	0	0	0
2. Tuition/Fee Revenue (c + g below)	157,226	157,226	177,130	177,130	187,082
a. Number of F/T Students	31	31	35	35	37
b. Annual Tuition/Fee Rate	4,976	4,976	4,976	4,976	4,976
c. Total F/T Revenue (a x b)	154,256	154,256	174,167	174,160	184,112
d. Number of P/T Students	2	2	2	2	2
e. Credit Hour Rate (Includes fees)	99	99	99	99	99
f. Annual Credit Hour Rate	15	15	15	15	15
g. Total P/T Revenue (d X e X f)	2,970	2,970	2,970	2,970	2,970
3. Grants, Contracts & Other External Sources	0	0	0	0	0
4. Other Sources*	0	0	0	0	0
TOTAL (Add 1- 4)	157,226	157,226	177,130	177,130	187,082

Table 1 Narrative

1. *Reallocated Funds - No funds will be reallocated for this certificate program. Garrett College already has “pre” allied health programs intended for student transfer. The general education courses included in this program are already being offered and no new faculty or programming is needed.*
2. *Tuition and Fee Revenue – In-county tuition rates and estimated book costs.*
3. *Grants and Contracts - No grants and contracts will be sought for this certificate program.*
4. *Other Sources – No other funding sources will be used for this certificate program.*

2. Complete **Table 2: Program Expenditures and Narrative Rationale**. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.

Table 2. Program Expenditures

Expenditure Categories*	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	0	0	0	0	0
a.# FTE	0	0	0	0	0
b. Total Salary (non-credit instructors)	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
2. Admin Staff (b + c below)	0	0	0	0	0
a.# FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
3. Support Staff (b + c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses (instructional materials)	0	0	0	0	0
TOTAL (Add 1- 7)	0	0	0	0	0

Table 2 Narrative

1. *New Faculty – no new faculty will be needed for this certificate program.*
2. *New Administrative Staff – no new administrative staff will be needed for this certificate program.*
3. *New Support Staff – no new support staff will be needed for this certificate program.*
4. *Technical Support and Equipment – no new materials or support will be needed.*
5. *Library – no new library resources are needed.*
6. *New or Renovated Space – no new or renovated space is needed.*
7. *Other Expenses – there are no other anticipated expenses.*

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1. Discuss procedures for evaluating courses, faculty, and student learning outcomes.

2. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.

Garrett College has a formal program review process whereby each of its academic and career programs are formally reviewed on a regular cycle. A new program is reviewed annually for its first three years and then, if successful, falls into the College's formal and comprehensive program review eight-year review cycle. In addition to the program data, the review considers information about faculty performance and all costs related to the program.

The program evaluation will also include the results from student learning outcomes assessment. In addition to college-wide general education student learning outcomes, the College has developed a set of program-level learning outcomes for every transfer and career program. Student learning outcomes are also assessed at the course level within each program. All assessment data is reviewed by the full faculty annually. Any corresponding shortcomings across programs is addressed, and course pedagogy altered if deemed necessary.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05).

1. Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

The College recruits in urban areas with large minority populations and approximately 25% of the current student body is comprised of non-white students.

O. Relationship to Low Productivity Programs Identified by the Commission:

1. If the proposed program is related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.

There is no relationship to a low productivity program.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.
2. Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.

This is not a Distance Education Program.